APPENDIX P

OFF-HIGHWAY VEHICLE MANAGEMENT PLAN

North Baja Pipeline, LLC

NORTH BAJA PIPELINE EXPANSION PROJECT

Appendix P
Off-Highway Vehicle Management Plan

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Appendix P

Off-Highway Vehicle Management Plan

1.0 INTRODUCTION

The North Baja Pipeline Expansion Project (Project) will construct a new natural gas pipeline to connect with the Gasoducto Bajanorte Pipeline at the U.S.-Mexico border and to the existing North Baja facilities and the El Paso Natural Gas system in Ehrenberg, Arizona. In addition, new connections will be made with the Southern California Gas Company (SoCalGas) system near Blythe, California, and with the Imperial Irrigation District's (IID) El Centro Generating Station in El Centro, California. The proposed Project will be constructed in phases, with the first phase planned for construction in 2007, the IID Lateral for 2008, and the final phase of the North Baja Expansion in 2009, pending completion of upstream liquefied natural gas (LNG) terminal facilities.

The Project includes three elements: the B-Line, which includes interconnection facilities in Ehrenberg, Arizona, as well as a 79.8-mile, 42- and 48-inch diameter pipeline between Blythe and the Mexican border; the Arrowhead Extension, which includes a meter station and a 2.1-mile, 36-inch diameter pipeline extending from the proposed B-Line at milepost (MP) 7.4 to SoCalGas' existing Blythe Compressor Station; and the Imperial Irrigation District Lateral (IID Lateral), a 45.7-mile, 16-inch diameter pipeline between the B-Line and IID's El Centro Generating Station.

Construction and operation of the Project could cause conditions that may affect adjacent lands, pipeline integrity, or off-highway vehicle (OHV) users. One of the near-term effects of construction could be disruption of established OHV use or interference with pipeline construction activities. One of the long-term effects of pipeline construction and maintenance is the increased accessibility the right-of-way may provide for OHV use into previously restricted or inaccessible areas. To reduce the potential for interference between pipeline construction activities and OHV users and inappropriate OHV use of the pipeline right-of-way, North Baja developed this plan to cover initial siting, construction, and operation of the pipeline. This plan is based on discussions with the Bureau of Land Management (BLM) recreation specialists and biologists in 2001-2002 and again in 2005, and experience gained while operating, maintaining, and managing the A-Line right-of-way since 2002.

2.0 SITING

The entire length of the B-Line will be located 25 feet west or south of the existing A-Line constructed in 2002. Use of the existing right-of-way does not add potential access points beyond those created by the A-Line and avoids creating a new right-of-way with new access points at some other location.

The IID Lateral, a new pipeline, has been sited at the edge of existing road shoulders or along existing transmission lines for 33.8 miles of its 46-mile total length. A 7.9-mile segment is located within the Imperial Sand Dunes Recreation Area (ISDRA), including a 5.6-mile distance through the Buttercup Management Area Campground, which is intensively managed for OHV uses. The selection of the IID Lateral route was based on an evaluation of alternative routes and consultation with the Bureau of Reclamation (BOR), IID, BLM, and the members of the Technical Review Team (Cassady 2005a, 2005b, 2005c). The location of the route accounts for concerns that arose during those consultation meetings.

The eastern end of the pipeline alignment (east of the All-American Canal [AAC] and Interstate [I-8]) will be located adjacent to an existing 500-kilovolt (kV) electric transmission line from MP 0.1 to MP 2.3. This portion of the route is in the Ogilby Management Area of the ISDRA, an area of lighter OHV use and away from any developed recreational facilities. Between MP 2.3 and MP 2.6, the pipeline will be directionally drilled under I-8 and the AAC. From MP 2.6 the alignment continues west adjacent to the I-8 right-of-way to MP 4.4. In this segment the route traverses the northern edge of the Buttercup Campground, avoiding the main parking and vendor area by hugging the I-8 right-of-way, an alignment that was suggested by the ISDRA Technical Review Team (TRT) (Cassady 2005d, Appendix T).

West of the Buttercup Campground, BLM suggested that the area between Grays Well Road and I-8 is less intensively used than the area to the south of Grays Well Road. Accordingly, North Baja considered a route in this strip between the freeway and Grays Well Road. This area currently contains a wood pole line and a fiber optic line (Level 3), and is also somewhat more constricted than it appears by a relatively wide (400-foot) CalTrans right-of-way. While early investigations suggested there may still be room for the 16-inch pipeline within the strip, upon completing a recent field survey to more accurately locate the Level 3 fiber optic conduits, North Baja concluded that there is not sufficient space for the pipeline within this area. Beginning at MP 4.4 the proposed route turns south crossing Grays Well Road and three electric transmission lines, which it then parallels for 1.2 miles. Other alignment adjustments were made in this stretch at the suggestion of BLM, with the goal of avoiding the most intensively used areas. At MP 5.7 the alignment crosses I-8 to an area between the freeway and the AAC, where there is no access for OHV users. The pipeline will cross this area between MP 5.7 and 7.9, adjacent to an area that will be used by IID for its AAC relining project. The line will be drilled beneath the AAC (and exit the ISDRA) at MP 7.9. A block valve will be located at MP7.6. The valve is located in an area between the I-8 right-of-way and the AAC that is generally avoided by OHV enthusiasts because it is very difficult to access.

3.0 CONSTRUCTION

In the area crossed by the B-Line, OHV use is permitted only on BLM-designated routes of travel except between MPs 71.1 and 74.5 (see Section 4.0). Prior to construction, the right-of-way will be clearly marked on the ground. Where active construction is underway, the right-of way will be occupied by workers and equipment. OHV users will be directed back to designated routes of travel.

Construction of the IID Lateral would normally be planned for the winter to avoid the hottest weather and the nesting bird season. Because peak OHV use season is from Labor Day to Easter and is especially high in November and December, BLM recreation planners and the TRT recommended that pipeline construction take place during the summer months to avoid conflict with the high use recreational season (North Baja 2005a, 2005b). North Baja has incorporated this suggestion into its proposed construction schedule. The TRT also raised concerns that various recreational activities might conflict with the pipeline if it was buried at standard depths. In response to these concerns, the pipeline will be buried to ensure 6 feet of cover (3 feet greater than typical pipeline depths) between MPs 2.7 and 5.7.

During construction, the work area within the ISDRA will be fenced to prevent recreational users from entering the construction area. Because this will represent a short-duration recreational use restriction in a limited area during the low-use season, this will not constitute a significant impact. Surface contours will be re-established once the pipeline has been installed.

4.0 OPERATION

Where the pipeline will be located in areas of authorized OHV use such as between MPs 71.1 and 74.5 of the B-Line and MPs 2.3 to 7.9 of the IID Lateral (both segments are in the ISDRA), the pipeline right-of-way will not be restricted for OHV use, so no significant impact on recreational use will result with respect to normal pipeline operations. Short-term recreational impacts could result from operation and maintenance activities if North Baja needed to perform major maintenance work, such as pipeline repairs; however, such major work would occur seldom, if ever. Routine maintenance at block valves will occur inside the fenced valve yard and will not affect recreational use. During operation, North Baja will maintain a rigorous program of inspection to ensure that underground facilities are properly marked and the integrity of the pipeline is intact. In areas outside of the ISDRA where OHV use is supposed to be confined to designated roads and trails, North Baja will employ appropriate OHV blocking tools.

4.1 OHV BLOCKING GOALS AND TOOLS

Based on the premises that OHV users will use the right-of-way as a road if there are no blocking measures, and that a relatively small investment in visual blocking can reduce OHV route proliferation, North Baja implemented in 2002 blocking measures at certain important intersecting road crossings for the A-Line. In 2002 three categories of roads were considered in the OHV blocking plan where crossed by the pipeline right-of-way:

- Paved roads,
- Existing unpaved roads, and
- Obvious OHV tracks.

Where the proposed right-of-way closely parallels an existing route, it was assumed that although the right-of-way is visible, it will not be attractive to OHV users. Inspection of the right-of-way from parallel roads during 2005 confirmed this original assumption.

Where the right-of-way crosses one of these road types, consideration was given to one of several OHV blocking tools:

- Berms will be placed across the right-of-way where it intersects an existing OHV road. Berm slopes shall not exceed 30 percent.
- Berms will be placed across the right-of-way as part of erosion control, strategically placed to reduce visibility and mimic local topography.
- Rock redistribution and strategic placement, without making it into a challenging obstacle course, will occur across the pipeline where large rock is available and such work would “erase” the visual cues of “road.”
- The right-of-way will be backbladed or raked by bulldozer or by hand, to erase the traces of the intersection of the pipeline with an existing OHV route or dirt road.

- Ocotillo and large cacti will be salvaged and replanted where they are available, with the understanding that survival criteria would not be applied because even dead specimens can provide convincing visual clues of "no road."
- Other desert species, including creosote bush scrub and desert wash woodland species (palo verde, ironwood, smoke tree, *etc.*) will also be salvaged and replanted, with the understanding that they would be unlikely to survive but could still provide value as a visual block even if they are dead.
- Woody material removed during construction will be redistributed across the right-of-way used to both disguise the right-of-way and serve as "vertical mulch."
- No action will be taken where it is apparent that no blocking measure would prevent OHV use.

4.2 ASSESSMENT

4.2.1 B-Line

An assessment of road crossings along the A-Line right-of-way was completed in December 2001 through the use of aerial photographs and field verification. The substrate, terrain, vegetation, and other roads within the area, especially those that run parallel to the right-of-way, were all considered during the assessment. Additionally, North Baja and BLM conducted a joint survey of the pipeline route prior to construction in order to further identify and assess locations where visual blocking of the right-of-way will help to discourage use of the right-of-way by unauthorized OHV traffic. The results of that assessment are described in the OHV Blocking Plan (North Baja 2001). The plan related specific landscape features for 16 route segments and the type of blocking methods that might be successful, and identified the method selected for a specific road crossing.

Because the B-Line will be located in the existing operational right-of-way for the A-Line, the same road crossings are still applicable. Proposed blocking measures are described below.

Milepost 0.36 (Riviera Drive) —An earthen berm was installed across North Baja's right-of-way on the western edge of Riviera Drive to discourage OHV users from accessing other parts of the property from that location. This has proven effective in discouraging access down the right-of-way from this location. However, OHV use on the right-of-way originating from other locations has been relatively heavy on the North Baja and adjacent SoCalGas rights-of-way. Based on a review of pre-construction aerial photography, this appears to be a continuation of an OHV use pattern established prior to North Baja's existence. North Baja proposes to reconstruct the earthen berm at Riviera Drive after construction of the Colorado River loop and, with the property owner's concurrence, will leave the right-of-way with a rougher, more hummocky surface, instead of the smooth finished grade that matches that adjacent ground surface. This may make the right-of-way less attractive as a travel way. North Baja will also offer to procure and install signs for the property owner, should he choose to attempt to discourage OHV access at the main entry points on the property (unrelated to the pipeline right-of-way).

Milepost 11.88—An existing dirt road crosses the right-of-way at MP11.88, this road also was used as a temporary access road to the right-of-way during A-Line construction in 2002. This area is very sandy and dominated by herbaceous plants and creosote bush, and the terrain is relatively flat. It is likely that this area will disguise itself fairly quickly with herbaceous plants, and thus the recommended method of visual blocking was raking and replanting of creosote bush. In 2005, evaluation of this revegetation effort indicated that OHV blocking efforts were successful. After construction of the B-Line, the right-of-way will be raked and creosote bush will be replanted to block OHV access.

Mileposts 12.5, 13.25, 14.9 (Gravel Pit Road), 16.2, and 18.3 (Bradshaw Trail)—These roads are all existing dirt roads that intersect with the powerline access road, which runs parallel to the right-of-way. The substrate is sand with small gravel, and the terrain is flat. The adjacency of the A-Line to the existing powerline right-of-way made visual blocking measures less likely to be effective, and the right-of-way does not increase access into previously inaccessible areas. The redistribution of woody material across the right-of-way was enough to discourage OHV traffic from using the pipeline as a road. Evaluation of this measure in 2005 indicated that these measures were effective. They will be re-instituted after construction of the B-Line.

Milepost 22.1—This major dirt road that is used by many recreational vehicle (RV) drivers to get to desired camping areas. The substrate and terrain are the same as above. In 2002, it was recommended that 3-foot berms be placed across the right-of-way at this location to discourage traffic from turning onto the right-of-way instead of the powerline right-of-way access road. Evaluation in 2005 of this measure indicated that it was effective. The same measures will be re-instituted after construction of the B-Line.

Mileposts 23.97, 24.04, and 24.27—These are signed access roads that lead into a dry desert wash, which is then used as OHV access. The terrain is flat, and the area is thickly vegetated with saltbush. Respreading the cut vegetation over the right-of-way to provide sufficient blocking were the measures implemented at these crossings in 2002. Evaluation of these measures in 2005 indicated that they were effective. They will be re-instituted after construction of the B-Line.

Milepost 34.95 (Walter's Camp Road)—This is a major road that parallels the bank of Milpitas Wash. The terrain at the area where the road crosses is hilly, so a berm could be used effectively to block OHV traffic and blend into the surrounding landscape. In 2002, a 3-foot berm was placed to the north of the road intersection because Milpitas Wash is directly south of the road intersection, and the bank of Milpitas Wash provided its own blocking. Evaluation of these measures in 2005 indicated that it was effective. It will be re-instituted after construction of the B-Line.

Mileposts 35.05 to 35.73 (Milpitas Wash)—Milpitas Wash is a large desert wash that is used as a track for OHV users. Because the banks of the wash were restored to their original contours in 2002, the pipeline route to the north and south of the wash was effectively blocked to OHV traffic within the wash. However, to more effectively reduce the visual cues, replanting of desert wash trees was recommended in 2002 for areas within the right-of-way and along the banks where the right-of-way intersects. Evaluation of these measures in 2005 indicated that

they were effective, and OHV usage has not created a problem in this area. They will be re-instituted after construction of the B-Line.

Mileposts 36.9, 41.5—The substrate along this part of the pipeline consists of desert varnish coated desert pavement, and the terrain is hilly. The right-of-way is approximately 250 feet off State Route 78 at this location. After construction of the A-Line in 2002, 3-foot-tall berms were constructed along the right-of-way, and backblading was also used. Evaluation of these measures in 2005 indicated that they were effective. They will be re-instituted after construction of the B-Line.

Milepost 39.0— At this location a dirt road and a wash intersect with the right-of-way. The substrate and terrain at this location are the same as that of MP 36.9A, as is the location of State Route 78. Therefore, the visual blocking method recommended is the strategic placing of berms (3 feet tall) along the right-of-way, the use of backblading, or both.

Milepost 42.25—This crossing is a desert wash that is used by OHV traffic. Because the banks of this wash are steep, the recontouring of the banks will provide OHV blocking. Replanting of desert wash vegetation will provide further visual blocking of the right-of-way.

Milepost 47.3—This is an existing dirt road that crosses the right-of-way behind the Border Patrol Checkpoint along State Route 78. The substrate and terrain at this location are similar to that at MPs 36.9A, 39.0A, and 41.5A. Two- to three-foot tall berms along the right-of-way and backblading were recommended and installed in this area in 2002. Evaluation of these measures in 2005 indicated that they were effective. They will be re-instituted after construction of the B-Line.

Milepost 49.0 (Black Mountain Road)—Black Mountain Road is a maintained dirt road. The road cut currently has berms on either side. The creation of 3-foot-tall berms across the right-of-way on either side of Black Mountain Road and replanting of salvaged cacti or ocotillo will create an effective block to OHV traffic.

Milepost 49.4—The right-of-way parallels a powerline at this location. A powerline access road crosses the right-of-way within a small desert wash. The use of a 4-foot berm at the edge of the wash in 2002 blended into the landscape and discouraged OHV traffic from using the pipeline as road access. Cacti and ocotillo salvage and replanting in 2002 also discouraged OHV traffic. Evaluation of these measures in 2005 indicated that they were effective. They will be re-instituted after construction of the B-Line.

Milepost 49.8—This location is similar to that at MP 49.4 in that the right-of-way parallels a powerline with an access road. Therefore, the blocking measure recommended and implemented in 2002 was a single 4-foot berm that blended into the landscape and cacti salvage and replanting to discourage OHV traffic from using the pipeline as a road. Evaluation of these measures in 2005 indicated that they were effective. They will be re-instituted after construction of the B-Line.

Mileposts 50.2, 50.7, and 51.8—These three crossings are all within dry desert washes with desert wash trees. The wash banks were restored after construction of the A-Line to their

natural contours, thereby providing natural berms. Additional blocking measures included salvage and replanting of desert wash trees across the right-of-way on both banks of the wash.

Mileposts 54.45 and 54.47—At this location two dirt roads intersect the right-of-way within approximately 125 feet of each other. The terrain is relatively flat, and the substrate is desert varnish-coated desert pavement. Backblading was used in 2002 to disguise the right-of-way, and 3-foot berms were placed across the right-of-way at the far north and south sides of the two roads to discourage OHV traffic on the right-of-way. These measures were effective and will be reinstated after construction of the B-Line.

Milepost 54.98 (Ogilby Road)—Ogilby Road is a paved county road that leads from State Route 78 to I- 8. To the south of this intersection, the right-of-way parallels Ogilby Road. To prevent OHV traffic to the north of this intersection, a 4-foot berm was placed across the right-of-way in 2002 on the north side of the intersection. Evaluation of these measures in 2005 indicated that they were effective because no OHV tracks were observed in this area. They will be re-instituted after construction of the B-Line.

Mileposts 55.85, 56.45, 56.92, 57.05, 66.8, 67.0, 69.25, and 70.9—The right-of-way at these eight crossings parallels Ogilby Road. The edge of the right-of-way is within 100 feet of Ogilby Road. The substrate is desert varnish-coated desert pavement, and the terrain is relatively flat and sparsely vegetated. The adjacency to Ogilby Road made blocking measures such as berms, backblading, or replanting unlikely to adequately block the right-of-way. Therefore, at these crossing locations no action was recommended or taken in 2002. Evaluations of these crossing measures in 2005 indicated limited OHV traffic. A similar approach will be taken after construction of the B-Line.

Mileposts 64.9 (Walker Way Road), 65.36 (County Road 8125), and 66.5 (Golden Rock Ranch Road)—These three roads are all maintained dirt roads that are predominantly used by RV drivers and other campers to get to desired camping spots. Because campers use the area, the right-of-way could potentially be seen as an OHV route. The maintenance of the roads has created berms, which were enhanced in 2002 after construction of the A-Line (to a total height of 4 feet) at the locations where they intersected the right-of-way to discourage drivers from using the right-of-way as a road. Evaluation of this measure in 2005 indicated that it was effective. They will be re-instituted after construction of the B-Line.

4.2.2 IID Lateral

Mileposts 0.0 to 7.9 (ISDRA)—This area is a recognized OHV use area. OHV blocking measures are unnecessary.

Mileposts 7.9 to 46.0 (primarily Imperial County roadways)—This segment of the IID Lateral will be located at the edge and sometimes in the pavement of the traveled way. OHV blocking measures are unnecessary.

4.2.3 Arrowhead Extension

The 2.1-mile Arrowhead Extension is partially in agricultural lands with the remainder in the Arrowhead Boulevard right-of-way. This area does not provide access to previously restricted or inaccessible areas; therefore, OHV blocking measures are unnecessary.

5.0 REFERENCES

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